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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,394	11/30/2001	Petri Helio	460-010714-US(PAR)	9029
2512	7590	11/03/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			SHARMA, SUJATHA R	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/000,394

Applicant(s)

HELIO ET AL.

Examiner

Sujatha Sharma

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/08/02, 5/17/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. ^{1-20 me} Claims ~~1~~ is rejected under 35 U.S.C. 102(b) as being anticipated by Ford [EP 475 705 A2].

Regarding claims 1,8,10,19 Ford discloses a method of aligning the frequency response of a variable band-pass filter in a radio receiver by using a reference frequency. Ford further discloses a method of changing the frequency of said atleast one reference signal (see col. 1, lines 1-43). Nick further discloses a method further comprising the steps of measuring the strength of the output signal of the filter and determining, on the basis of the measurement on the strength of the output signal Of the tilter, the location of the pass band of said filter (see col. 7, lines 2-36, col. 8, lines 38-49).

Regarding claims 2,11 Ford further discloses a method wherein, on the basis of measurements, at least one maximum point is searched for the strength of the output signal. See col. 7, lines 2-36.

Regarding claims 3,4,12,13 Ford further discloses a method wherein the frequency of said reference signal is changed, until at least one maximum point is found, wherein the

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frequency of said reference signal at said maximum point indicates the location of the pass band of the filter. See col. 7, line 2 – col. 8, line 49.

Regarding claims 5,16 Ford further discloses a method wherein the tuning of the filter is performed automatically. See col. 2, lines 6-9.

Regarding claims 6,17 Ford further discloses a method wherein the tuning of the filter is performed at intervals. See col. 8, line 50 – col. 9, line 2 (where the tuning is performed whenever required and so at some intervals for example depending on the aging of filter).

Regarding claims 7,9,18,20 Ford further discloses a method wherein said filter used is a complex filter. See col. 7, lines 6-12.

Regarding claim 14, Ford further discloses a method wherein the means for changing the time constant of said at least one filter comprise an adjustable capacitor. See col. 1, lines 17-25.

Regarding claim 15, Ford further discloses a method wherein the means for changing the time constant of said at least one filter comprise at least one capacitor, and selection means for connecting said at least one capacitor in a disconnectable manner to said time constant of the filter. See Fig. 4.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Holden [US 6,266,522] Apparatus and methods for tuning bandpass filters

Pugel [US 6,553,216] RF tunable filter arrangement with tunable image trap

Hernandez [US 6,097,269] Electrically tunable band pass filter with symmetrical low side and high side protection

Shirakawa [US 5,758,276] Double super heterodyne receiver with low-pass and high-pass filters controlled by respective switching devices

Porambo [US 5,280,638] RF filter self alignment for multiband radio receiver

Thomas [US 5,065,453] Electrically tunable band-pass filter

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 703-305-5298. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sujatha Sharma
October 20, 2004



NAY MAUNG

SUPERVISORY PATENT EXAMINER